APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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		EXAMINER
7590	03/01/2004	CHEN, CHONGSHAN

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ART UNIT	PAPER NUMBER
2172	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	09/973,678	LAWTON, SCOTT S.	
	Examiner	Art Unit	
	Chongshan Chen	2172	

-- The MAILING DATE of this communication appears on the cov r sheet with the correspondence addr ss --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.
2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-28</u> is/are pending in the application.
     4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-28</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
     a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-28 are pending in this Office Action.

Claim Objections

2.   Claims 1-28 are objected to because of the following informalities: inappropriately using bullets in the claims. Appropriate correction is required.

3.   Claims 1, 5, 7, 9, 14, 15, 17, 19-22 and 28 are object to because of the following informalities: inappropriately use the term "and/or" in the claim language. It is unclear to the examiner whether the applicant means "and" or "or", therefore, the examiner interprets the applicant means "or" for the term "and/or".

4.   Claims 1, 3, 12, 25 and 28 are object to because of the following informalities: inappropriately use the term "zero or more" in the claim language. It is unclear to the examiner whether the applicant means "zero" or "more", therefore, the examiner interprets the applicant means zero for the term "zero or more".

5.   Claims 3 and 12 are objected to because of the following informalities: inappropriately use the term "if any" in the claim language. It is unclear to the examiner what the applicant means "if any". Appropriate correction is required.

6.   Claim 3 is object to because of the following informalities: misspelling "identifers" in the second line of the first limitation in claim 3. Appropriate correction is required. Correction for other misspelling in other claims is required.

7.   Claim 25 is objected to because of the following informalities: it is unclear what is VDU in the last limitation of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9.   Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10.   Claim 1 recites the limitation "the primary sort order" in the 2nd to the last line in claim 1. There is insufficient antecedent basis for this limitation in the claim. Correction for other lack of antecedent basis in the claims is required.

11.   The independent claims 24 and 25 recites the limitation "an ACFS as recited in claim 1" is inappropriate.

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13.   Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over AddressPro (AddressPro v4.0 (c) Copyright January 2000 by ZingWare).

          As per claim 1, AddressPro teaches an Adaptive Criteria Filtering System (ACFS) that assembles sort criteria for an Information Sorting Mechanism (ISM), the ACFS comprising:

receive the instruction list (AddressPro, 6.2, Changing the display and sort order of the

address list, the user enters sort instructions),

receive the secondary sort criteria (AddressPro, 6.2, Changing the display and sort order

of the address list, secondary sort field),

create the adapted list by merging the instruction list with relevant portions of the

secondary sort criteria which may include the entire secondary sort criteria (AddressPro, 6.2,

Changing the display and sort order of the address list, "the secondary sort field is used to sort

the list if the records has the same data in the main sort field". Clearly, the sorting method

merges the secondary sort field with the main sort field), and

send the adapted list to the output port (AddressPro, 6.2, Changing the display and sort

order of the address list, display);

whereby the ACFS adapts secondary sort criteria to user-specified sort criteria, giving the

user control over the primary sort order while retaining the benefit of the secondary sort criteria

(AddressPro, 6.2, Changing the display and sort order of the address list, "the secondary sort

field is used to sort the list if the records has the same data in the main sort field").

AddressPro does not explicitly disclose an instruction port, a secondary port and an

output port. However, a port is an interface through which data is transferred between a

computer and other devices (such as a printer, mouse, keyboard, or monitor), a network, or a

direct connection to another computer (Microsoft Computer Dictionary). It is obvious the

AddressPro includes all the ports so that the sort/display system can receive sort instructions

from the user, sort and display the address list. Therefore, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to include an instruction port, a

secondary port and an output port in the system of AddressPro so that the sort/display system can receive sort instructions from the user, sort and display the address list.

As per claim 2, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the secondary sort criteria includes a default list having at least one data element identifier; and the filter assembles the adapted list consisting of the contents of the instruction list followed by each of the identifiers from the default list that are not in the instruction list (AddressPro, 6.2, Changing the display and sort order of the address list).

As per claim 3, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the secondary sort criteria includes a list having at least one primary data element identifier and an associated list of zero or more implied data element identifiers for each primary data element identifier; and the filter assembles the adapted list by starting with an empty adapted list, iterating through the instruction list, and, for each item in the instruction list adding, without regard to order, one or both of the item itself and the implied data element identifiers, if any, that is associated with the item (AddressPro, 6.2, Changing the display and sort order of the address list).

As per claim 4, AddressPro teaches all the claimed subject matters as discussed in claim 3, and further teaches the filter first adds the implied data element identifers and then adds the item (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

As per claim 5, AddressPro teach all the claimed subject matters as discussed in claim 4 except for explicitly disclosing the implied data includes at least one of the following: City IMPLIES Area Code; City IMPLIES State; City IMPLIES Province; City IMPLIES Country, State; City IMPLIES Country, Province; State IMPLIES Country; Company Name IMPLIES

IsRecruitingAgency; and/or Job Title IMPLIES IsContractPosition. However, the database in

AddressPro includes city and phone number which includes area code. It is obvious the city

information implies area code so that the information can identify which state the city is in.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to have implied data in order to identify which state the city is in.

As per claim 6, AddressPro teaches all the claimed subject matters as discussed in claim

3, and further teaches the filter first adds the item and then adds the implied data element

identifers (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

Claim 7 is rejected on grounds corresponding to the reasons given above for claim 5.

As per claim 8, AddressPro teaches all the claimed subject matters as discussed in claim

3, and further teaches the filter adds the implied data element identifers and does not add the item

(AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list).

Claim 9 is rejected on grounds corresponding to the reasons given above for claim 5.

As per claim 10, AddressPro teaches all the claimed subject matters as discussed in claim

3, and further teaches the filter does not add any specific data element identifier to the adapted

list if the adapted list already contains the identifier (AddressPro, 1. Overview, 6.2, Changing the

display and sort order of the address list).

As per claim 11, AddressPro teaches all the claimed subject matters as discussed in claim

3, and further teaches the filter adds every implied data element identifer that is implied by any

implied data element identifier (AddressPro, 1. Overview, 6.2, Changing the display and sort

order of the address list).

As per claim 12, AddressPro teaches all the claimed subject matters as discussed in claim

1, and further teaches the secondary sort criteria includes a list having at least one default data

element identifier and a list having at least one primary data element identifier and an associated

list of zero or more implied data element identifers for each primary data element identifier; and

the filter assembles the adapted list by starting with an empty adapted list and: iterating through

the instruction list, and, for each item in the instruction list adding to the adapted list, without

regard to order, one or both of the item itself and the implied data element identifiers, if any, that

is associated with the item; and iterating through the default list, and, for each item not in the

adapted list, adding to the adapted list, without regard to order, one or both of the item itself and

the implied data element identifiers, if any, that is associated with the item (AddressPro, 1.

Overview, 6.2, Changing the display and sort order of the address list).

As per claim 13, AddressPro teaches all the claimed subject matters as discussed in claim

1, and further teaches a control port configured to receive an optional command; and wherein

the filter reads the command from the control port, and, if the command indicates that the

secondary sort criteria should not be used, the filter creates an adapted list identical to the

instruction list (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address

list).

As per claim 14, AddressPro teaches all the claimed subject matters as discussed in claim

1, and further teaches the ISM is comprised of a database, a database management system, a

search engine supporting full-text search and sorting by data elements within the text, and/or a

sorting library or code module (AddressPro, 1. Overview, 6.2, Changing the display and sort

order of the address list, the examiner interprets the "and/or" as or).

As per claim 15, AddressPro teaches all the claimed subject matters as discussed in claim

1, and further teaches each data element is comprised of a database field, tagged data including

HTML, XML, or SGML, meta data, and/or a document (AddressPro, 1. Overview, 6.2,

Changing the display and sort order of the address list, the examiner interprets the "and/or" as

or).

As per claim 16, AddressPro teaches all the claimed subject matters as discussed in claim

1, and further teaches the secondary port is comprised of static data stored in a storage means

(AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the

examiner interprets the "and/or" as or).

As per claim 17, AddressPro teaches all the claimed subject matters as discussed in claim

1, and further teaches the secondary port is configured to interact with code; and wherein the

filter is configured to invoke the code in a procedural, object-oriented and/or other programmatic

fashion (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list,

the examiner interprets the "and/or" as or).

As per claim 18, AddressPro teaches all the claimed subject matters as discussed in claim

1, and further teaches the instruction port is coupled to an HTTP Web server, or coupled to a

computer-readable media, or configured to communicate via a standard electronic messaging

protocol (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list,

the examiner interprets the "and/or" as or).

As per claim 19, AddressPro teaches all the claimed subject matters as discussed in claim

1, and further teaches the output port is configured to interact with code; and wherein the filter is

configured to invoke the ISM in a procedural, object-oriented and/or other programmatic fashion

(AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 20, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the ACFS is implemented as a script embedded in, and/or linked to, a document employing a markup language including HTML, XML or SGML (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 21, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the ACFS is implemented as a desktop, clientserver, and/or n-tier application (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 22, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches the filter is further configured to translate the adaptive list to the syntax and/or the format of the target ISM (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 23, AddressPro teaches all the claimed subject matters as discussed in claim 1, and further teaches each data element is part of a data object, the data object having at least one data unit of employment information (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, the examiner interprets the "and/or" as or).

As per claim 24, AddressPro teaches a sort system comprising: an ACFS as recited in claim 1; and an ISM coupled to the ACFS, to a data producer, and to a data consumer, the ISM being configured to receive the sort criteria in a predetermined syntax, receive the data from the

data producer, sort the data according to the sort criteria, and forward the sorted data to the data

producer (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list,

the examiner interprets the "and/or" as or).

As per claim 25, AddressPro teaches a search system comprising:

an ACFS as recited in claim 1 (see rejection for claim 1);

a search port configured to receive search criteria (AddressPro, 1. Overview, 6.2,

Changing the display and sort order of the address list, search);

an Information Location Mechanism (ILM) configured to locate zero or more data

objects that match the received search criteria (AddressPro, 1. Overview, 6.2, Changing the

display and sort order of the address list, search);

an ISM being configured to receive the sort criteria in a predetermined syntax, receive a

plurality of data objects from the ILM, sort the data according to the sort criteria, and forward the

sorted data objects to the IFM (AddressPro, 1. Overview, 6.2, Changing the display and sort

order of the address list, sort); and

a client process and VDU to display the formatted data objects (AddressPro, 1. Overview,

6.2, Changing the display and sort order of the address list, display).

AddressPro does not explicitly disclose an Information Formatting Mechanism (IFM

configured to format data. However, AddressPro disclose a database stores address information.

The information in a database has certain format, it is formatted. Therefore, it is obvious the

AddressPro includes an information formatting mechanism.

As per claim 26, AddressPro teaches all the claimed subject matters as discussed in claim

25, except for explicitly disclosing the data formatting employs a markup language including

HTML, XML or SGML. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to format date employing HTML, XML or SGML in order to provide data using web technology.

As per claim 27, AddressPro teaches all the claimed subject matters as discussed in claim 25, and further teaches the contents of at least one data element of at least one data object contains employment information (AddressPro, 1. Overview, 6.2, Changing the display and sort order of the address list, display).

Claim 28 is rejected on grounds corresponding to the reasons given above for claim 1.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ortega et al. (6,401,084) disclose merging query lists (col. 8, line 66 – col. 9, line10).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is 703-305-8319. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703)305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 20, 2004

SHAHID ALAM
PRIMARY EXAMINER